

Abstract

The resurfacing of roads and in particular bridge decks includes spreading with a squeegee a thin layer of polymer modified concrete over a bridge deck surface and then applying by broadcasting a layer of rock chips to the wet concrete to provide a high friction surface. A second layer of the polymer modified concrete is then applied over the first layer of rock chips using the squeegee and a second layer of rock chips is then broadcast over that layer and then heavy quartz sand is applied. In another embodiment, heating wires are laid on the road surface and a thick layer of polymer modified concrete is applied over the wires to embed them in the polymer modified concrete. Then a single layer of rock is applied to the surface of the polymer modified concrete. If ruts or potholes are present in the road surface, these defects are repaired prior to the road resurfacing. Repair of potholes is accomplished by mixing granite aggregate rock chips with polymer modified concrete to form a putty which is then screeded into the potholes and ruts. Anti-ponding lines may be formed into the polymer modified concrete by raking the surface while it is still wet.